

EXAMINERS AMENDMENT

1. An examiner Amendment to the record appears below. Should the changes and/or additions be unacceptable to the applicant, an amendment may be filed as provided by 37 C.F.R 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the Issue Fee.
2. Authorization for this Examiner's Amendment was given in a telephone interview with John T. Kalnay (Registration No. 46,816) on March 5, 2009.
3. The application is amended as follows:
Cancel claims 2, 3, 14 – 16, 18, 19, 29 – 31.

1.(currently amended) In a network device in a network, a method of establishing a communications path through the network device for a stream of data, the method comprising the steps, of:

- receiving a first data distribution message from an upstream device in the network;
- acknowledging receipt of the first data distribution message to the upstream device in the network;
- forwarding a second data distribution message to a downstream device in the network; and
- determining if the network device receives an acknowledgment of receipt of the

second data distribution message, and if the network device receives an acknowledgment, establishing at least one path through the network device for a stream of data identified by the first data distribution message between the upstream device and a downstream device identified in the acknowledgment;

wherein the step of receiving a first data distribution message from an upstream device in the network comprises the steps of:

obtaining, from the first data distribution message, a stream identifier that identifies the stream of data for which the communications path is to be established through the network device;

storing the stream identifier in a path table, the path table used by a data distribution process in the network device to identify paths for the stream of data through the network device;

configuring an upstream device identifier in the second data distribution message with an identity of the network device that received the first data distribution message;

wherein the step of establishing at least one path through the network device between the upstream device and the downstream device comprises the steps of:

obtaining a downstream device identifier from within the acknowledgment, the downstream device identifier identifying a downstream network device that supports the data distribution protocol and that originated the acknowledgment;

obtaining a stream identifier from within the acknowledgment, the stream identifier identifying a stream of data to which the acknowledgment is associated;
and creating a path entry in the path table for a stream of data identified by the stream identifier in the acknowledgment received by the network device by associating the downstream device identifier to the stream identifier in the path table to create a path for the stream of data to each downstream device associated with the stream identifier.

4. (currently amended) The method of claim 3 **1** wherein the stream identifier includes at least one of:

- i) a data indicator for the stream of data; and
- ii) an identification of the server computer system providing the stream of data.

5. (currently amended) The method of claim 3 **1** wherein the step of creating a path entry in the path table for the stream of data identified by the stream identifier further comprises the step of:

incrementing a host device counter associated with the path entry in the path table for the stream of data in order to track how many host devices use a path defined by the path entry in the network device to receive the stream of data.

17. (currently amended) A network device comprising:

an communications interface;

a memory system;

a processor; and

an interconnection mechanism coupling the communications interface, the memory system, and the processor;

wherein the memory system is configured with a data distribution application, that when performed on the processor, provides a data distribution process that establishes a communications path through the network device in a network for a stream of data by performing the operations of:

receiving, via the communications interface, a first data distribution message from an upstream device in the network;

acknowledging receipt of the first data distribution message to the upstream device in the network;

forwarding, via the communications interface, a second *data* distribution message to a downstream device in the network; and

determining if the network device receives an acknowledgment of receipt of the second data distribution message, and if the network device receives an acknowledgment, establishing, in the memory system, at least one path through the network device for a stream of data identified by the first data distribution message between the upstream device and a downstream device identified in the acknowledgment;

wherein when the data distribution process performs the operation of receiving a first data distribution message from an upstream device in the network, the data distribution process performs the operations of:

obtaining, from the first data distribution message in the memory system, a stream identifier that identifies the stream of data for which the communications path is to be established through the network device;

storing the stream identifier in a path table in the memory system, the path table used by a data distribution process in the network device to identify paths for the stream of data through the network device; and

configuring an upstream device identifier in the second data distribution message in the memory system with an identity of the network device that received the first data distribution message;

wherein when the data distribution process performs the operation of establishing at least one path through the network device between the upstream device and the downstream device, the data distribution process performs the operations of:

obtaining a downstream device identifier from within the acknowledgment in the memory system, the downstream device identifier identifying a downstream network device that supports the data distribution protocol and that originated the acknowledgment;

obtaining a stream identifier from within the acknowledgment in the memory system, the stream identifier identifying a stream of data to which the acknowledgment is associated; and

creating a path entry in the path table for a stream of data identified by the stream identifier in the acknowledgment received by the network device by associating the downstream device identifier to the stream identifier in the path table to create a path for the stream of data to each downstream device associated with the stream identifier.

20. (currently amended) The network device of claim 49- 17 wherein the stream identifier includes at least one of:

- i) a data indicator for the stream of data; and
- ii) an identification of the server computer system providing the stream of data.

21. (currently amended) The network device of claim 49- 17 wherein when the data distribution process performs the operation of creating a path entry in the path table for the stream of data identified by the stream identifier, the data distribution process performs the operation of:

incrementing a host device counter associated with the path entry in the path table for the stream of data in order to track how many host devices use a path defined by the path entry in the network device to receive the stream of data.

4. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sargon Nano whose telephone number is (571) 272-4007. The examiner can normally be reached on Monday - Friday 8:00am-5:00pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (571) 272-4001. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Sargon N Nano/

Examiner, Art Unit 2457

/ARIO ETIENNE/

Supervisory Patent Examiner, Art Unit 2457